

AXIAL-FLOW OUTBOARD
JET PROPULSION UNIT

ABSTRACT OF THE DISCLOSURE

5 An axial-flow outboard water jet propulsion unit is designed so that it does not extend below the bottom of the boat hull, but rather is disposed directly behind the hull transom. This is achieved by arranging the impeller shaft generally perpendicular to a generally vertical drive shaft, and by installing the impeller in a flow-through duct which, although placed directly behind the transom, has an inlet for taking in water located directly below the impeller shaft. The duct does not extend to a depth lower than the lowest point of the hull bottom. The impeller shaft penetrates the duct wall, while the impeller itself is rotatable inside the duct. The impeller impels water rearward toward a convergent exit nozzle of the duct, sucking in water through the duct intake. The aft opening of the exit nozzle forms the duct discharge outlet.

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